

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-9. (cancelled)

10. (currently amended) A nonaqueous electrolyte secondary battery having an electrode assembly which is arranged, together with a nonaqueous electrolyte containing a lithium salt, in a sealed container, said electrode assembly being composed of a positive electrode and a negative electrode which are laminated one over another with a separator interposed between them, said positive electrode being formed into a sheet from a positive electrode mix prepared mainly from the a boronized graphitic material as defined in any of Claims 1 to 2 containing boron or a boron compound such that the content of boron therein is 0.05-11 wt%, the boronized graphitic material being involved in charging-discharging reaction, said negative electrode being formed into a sheet from a negative electrode mix prepared mainly from a carbonaceous material capable of occluding and releasing lithium, wherein the positive electrode and the negative electrode are arranged, with a separator interposed between them, in such a way that the periphery of the plane of the negative electrode facing to the positive electrode, said plane being projected to the plane of the positive electrode facing to the negative electrode, is surrounded by the periphery of the plane of the positive electrode facing to the negative electrode.

11. (currently amended) A nonaqueous electrolyte secondary battery having an electrode assembly which is arranged, together with a nonaqueous electrolyte containing a lithium salt, in a sealed container, said electrode assembly being composed of a positive electrode and a negative electrode which are laminated one over another with a separator interposed between them, said positive electrode being formed into a sheet from a positive electrode mix prepared mainly from the a boronized graphitic material as defined in Claim 7 containing boron or a boron compound such that the content of boron therein is 0.05-11 wt% which meets the following requirements (a) and (b):

(a) the graphitic material having a graphite crystal structure has the (002) plane such that the average interplaner spacing $d(002)$ is no larger than 3.365 Å;

(b) Raman spectroscopy with an argon ion laser beam having a wavelength of 5145 Å gives a peak (Pa) in the wavelength region of $1580 \pm 100 \text{ cm}^{-1}$ and a peak (Pb) in the wavelength region of $1360 \pm 100 \text{ cm}^{-1}$, with the peak (Pa) having a peak intensity (Ia) and the peak (Pb) having a peak intensity (Ib) such that the value of R defined as $\text{Value (R)} = I_b/I_a$ is no smaller than 0.35, the boronized graphitic material being involved in charging-discharging reaction, said negative electrode being formed into a sheet from a negative electrode mix prepared mainly from a carbonaceous material capable of occluding and releasing lithium, wherein the positive electrode and the negative electrode are arranged, with a separator interposed between them, in such a way that the periphery of the plane of the negative electrode facing to the positive electrode, said plane being projected to the plane of the positive electrode facing to the negative

electrode, is surrounded by the periphery of the plane of the positive electrode facing to the negative electrode.

12. (currently amended) A nonaqueous electrolyte secondary battery having an electrode assembly which is arranged, together with a nonaqueous electrolyte containing a lithium salt, in a sealed container, said electrode assembly being composed of a positive electrode and a negative electrode which are laminated one over another with a separator interposed between them, said positive electrode being formed into a sheet from a positive electrode mix prepared mainly from the a boronized graphitic material as defined in Claim 8 containing boron or a boron compound such that the content of boron therein is 0.05-11 wt% and having a porosity of 0.2 to 0.6, the boronized graphitic material being involved in charging-discharging reaction, said negative electrode being formed into a sheet from a negative electrode mix prepared mainly from a carbonaceous material capable of occluding and releasing lithium, wherein the positive electrode and the negative electrode are arranged, with a separator interposed between them, in such a way that the periphery of the plane of the negative electrode facing to the positive electrode, said plane being projected to the plane of the positive electrode facing to the negative electrode, is surrounded by the periphery of the plane of the positive electrode facing to the negative electrode.

13. (currently amended) A nonaqueous electrolyte secondary battery having an electrode assembly which is arranged, together with a nonaqueous electrolyte containing a lithium salt, in a sealed container, said electrode assembly being composed of a positive electrode and a negative electrode which are laminated one

over another with a separator interposed between them, said positive electrode being formed into a sheet from a positive electrode mix prepared mainly from the a boronized graphitic material as defined in Claim 9 containing boron or a boron compound such that the content of boron therein is 0.05-11 wt% and having a porosity of 0.2 to 0.6 which meets the following requirements (a) and (b):

(a) the graphitic material having a graphite crystal structure has the (002) plane such that the average interplaner spacing $d(002)$ is no larger than 3.365 Å;

(b) Raman spectroscopy with an argon ion laser beam having a wavelength of 5145 Å gives a peak (Pa) in the wavelength region of $1580 \pm 100 \text{ cm}^{-1}$ and a peak (Pb) in the wavelength region of $1360 \pm 100 \text{ cm}^{-1}$, with the peak (Pa) having a peak intensity (Ia) and the peak (Pb) having a peak intensity (Ib) such that the value of R defined as Value (R) = Ib/Ia is no smaller than 0.35, the boronized graphitic material being involved in charging-discharging reaction, said negative electrode being formed into a sheet from a negative electrode mix prepared mainly from a carbonaceous material capable of occluding and releasing lithium, wherein the positive electrode and the negative electrode are arranged, with a separator interposed between them, in such a way that the periphery of the plane of the negative electrode facing to the positive electrode, said plane being projected to the plane of the positive electrode facing to the negative electrode, is surrounded by the periphery of the plane of the positive electrode facing to the negative electrode.

14. (currently amended) A nonaqueous electrolyte secondary battery provided with a wound electrode assembly consisting of a beltlike positive electrode formed from a positive electrode mix composed mainly of the a boronized graphitic

material defined in any of Claims 1 to 2 containing boron or a boron compound such that the content of boron therein is 0.05-11 wt%, the boronized graphitic material being involved in charging-discharging reaction, a beltlike negative electrode formed from a negative electrode mix composed mainly of a carbonaceous material capable of occluding and releasing lithium, and a beltlike separator interposed between them, said positive electrode, said negative electrode, and said separator being spirally wound in their lengthwise direction,

wherein the negative electrode has a region within its innermost winding region and also has a first margin in the lengthwise direction facing to the inner periphery of the winding part such that it projects from the end at the innermost winding region of the negative electrode, and a second margin in the lengthwise direction facing to the outer periphery of the winding part such that it projects from the end at the outermost winding region of the negative electrode, and a third margin and a fourth margin are formed such that the ends in the widthwise direction of the positive electrode project from both ends positioned in the widthwise direction of the negative electrode over the entire region in the lengthwise direction of the negative electrode.

15. (currently amended) A nonaqueous electrolyte secondary battery provided with a wound electrode assembly consisting of a beltlike positive electrode formed from a positive electrode mix composed mainly of a boronized graphitic material defined in Claim 7 containing boron or a boron compound such that the content of boron therein is 0.05-11 wt% which meets the following requirements (a) and (b):

(a) the graphitic material having a graphite crystal structure has the (002) plane such that the average interplaner spacing $d(002)$ is no larger than 3.365 Å;

(b) Raman spectroscopy with an argon ion laser beam having a wavelength of 5145 Å gives a peak (Pa) in the wavelength region of $1580 \pm 100 \text{ cm}^{-1}$ and a peak (Pb) in the wavelength region of $1360 \pm 100 \text{ cm}^{-1}$, with the peak (Pa) having a peak intensity (Ia) and the peak (Pb) having a peak intensity (Ib) such that the value of R defined as $\text{Value (R)} = I_b/I_a$ is no smaller than 0.35, the boronized graphitic material being involved in charging-discharging reaction, a beltlike negative electrode formed from a negative electrode mix composed mainly of a carbonaceous material capable of occluding and releasing lithium, and a beltlike separator interposed between them, said positive electrode, said negative electrode, and said separator being spirally wound in their lengthwise direction,

wherein the negative electrode has a region within its innermost winding region and also has a first margin in the lengthwise direction facing to the inner periphery of the winding part such that it projects from the end at the innermost winding region of the negative electrode, and a second margin in the lengthwise direction facing to the outer periphery of the winding part such that it projects from the end at the outermost winding region of the negative electrode, and a third margin and a fourth margin are formed such that the ends in the widthwise direction of the positive electrode project from both ends positioned in the widthwise direction of the negative electrode over the entire region in the lengthwise direction of the negative electrode.

16. (currently amended) A nonaqueous electrolyte secondary battery provided with a wound electrode assembly consisting of a beltlike positive electrode formed from a positive electrode mix composed mainly of the a boronized graphitic material defined in Claim 8 containing boron or a boron compound such that the content

of boron therein is 0.05-11 wt% and having a porosity of 0.2 to 0.6, the boronized graphitic material being involved in charging-discharging reaction, a beltlike negative electrode formed from a negative electrode mix composed mainly of a carbonaceous material capable of occluding and releasing lithium, and a beltlike separator interposed between them, said positive electrode, said negative electrode, and said separator being spirally wound in their lengthwise direction,

wherein the negative electrode has a region within its innermost winding region and also has a first margin in the lengthwise direction facing to the inner periphery of the winding part such that it projects from the end at the innermost winding region of the negative electrode, and a second margin in the lengthwise direction facing to the outer periphery of the winding part such that it projects from the end at the outermost winding region of the negative electrode, and a third margin and a fourth margin are formed such that the ends in the widthwise direction of the positive electrode project from both ends positioned in the widthwise direction of the negative electrode over the entire region in the lengthwise direction of the negative electrode.

17. (currently amended) A nonaqueous electrolyte secondary battery provided with a wound electrode assembly consisting of a beltlike positive electrode formed from a positive electrode mix composed mainly of the a boronized graphitic material defined in Claim 9 containing boron or a boron compound such that the content of boron therein is 0.05-11 wt% and having a porosity of 0.2 to 0.6 which meets the following requirements (a) and (b):

(a) the graphitic material having a graphite crystal structure has the (002) plane such that the average interplaner spacing $d(002)$ is no larger than 3.365 Å;

(b) Raman spectroscopy with an argon ion laser beam having a wavelength of 5145 Å gives a peak (Pa) in the wavelength region of $1580 \pm 100 \text{ cm}^{-1}$ and a peak (Pb) in the wavelength region of $1360 \pm 100 \text{ cm}^{-1}$, with the peak (Pa) having a peak intensity (Ia) and the peak (Pb) having a peak intensity (Ib) such that the value of R defined as Value (R) = I_b/I_a is no smaller than 0.35, the boronized graphitic material being involved in charging-discharging reaction, a beltlike negative electrode formed from a negative electrode mix composed mainly of a carbonaceous material capable of occluding and releasing lithium, and a beltlike separator interposed between them, said positive electrode, said negative electrode, and said separator being spirally wound in their lengthwise direction,

wherein the negative electrode has a region within its innermost winding region and also has a first margin in the lengthwise direction facing to the inner periphery of the winding part such that it projects from the end at the innermost winding region of the negative electrode, and a second margin in the lengthwise direction facing to the outer periphery of the winding part such that it projects from the end at the outermost winding region of the negative electrode, and a third margin and a fourth margin are formed such that the ends in the widthwise direction of the positive electrode project from both ends positioned in the widthwise direction of the negative electrode over the entire region in the lengthwise direction of the negative electrode.

18. (new) A nonaqueous electrolyte secondary battery as defined in claim 10, wherein the boronized graphitic material containing silicon or a silicon compound such that the content of silicon therein is 0.01-5 wt%.

19. (new) A nonaqueous electrolyte secondary battery as defined in claim 11, wherein the boronized graphitic material containing silicon or a silicon compound such that the content of silicon therein is 0.01-5 wt%.

20. (new) A nonaqueous electrolyte secondary battery as defined in claim 12, wherein the boronized graphitic material containing silicon or a silicon compound such that the content of silicon therein is 0.01-5 wt%.

21. (new) A nonaqueous electrolyte secondary battery as defined in claim 13, wherein the boronized graphitic material containing silicon or a silicon compound such that the content of silicon therein is 0.01-5 wt%.

22. (new) A nonaqueous electrolyte secondary battery as defined in claim 14, wherein the boronized graphitic material containing silicon or a silicon compound such that the content of silicon therein is 0.01-5 wt%.

23. (new) A nonaqueous electrolyte secondary battery as defined in claim 15, wherein the boronized graphitic material containing silicon or a silicon compound such that the content of silicon therein is 0.01-5 wt%.

24. (new) A nonaqueous electrolyte secondary battery as defined in claim 16, wherein the boronized graphitic material containing silicon or a silicon compound such that the content of silicon therein is 0.01-5 wt%.

25. (new) A nonaqueous electrolyte secondary battery as defined in claim 17, wherein the boronized graphitic material containing silicon or a silicon compound such that the content of silicon therein is 0.01-5 wt%.